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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,049	03/26/2001	Joe Depaolantonio	CSCO-93561.US.P	9199

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EXAMINER
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EL HADY, NABIL M

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/818,049

Applicant(s)

DEPAOLANTONIO, JOE

Examiner

Nabil M El-Hady

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/30/2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

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1.

1. Claims 1-31 are pending in this application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-10, 20, 24, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima et al. (US 6,470,385), hereinafter "Nakashima" in view of Keeble et al. (US 6,128,753), hereinafter "Keeble".

4. As per claim 1, Nakashima teaches a method of performing an audit of a network, said method comprising the steps of: querying of devices in said network for device configuration information, wherein said plurality of devices comprise at least one node which is specified by said configuration information (e.g. col. 1, lines 42-55); based on a response from said plurality of devices to said queries of said step a), issuing a plurality of queries to retrieve status information from a plurality of nodes in said network (e.g. col. 1, lines 42-55); analyzing the responses to said status queries to create network audit information (e.g. col. 1, lines 45-50); and reporting said network audit information (e.g. Figure 9). Nakashima, in addition, discloses analyzing the response to said status queries according to a set of rules (abstract, lines 15-17).

5. Nakashima does not disclose ranking of nodes of the plurality of devices in analyzing the responses. Keeble, on the other hand, discloses ranking of nodes of the plurality of devices in analyzing the responses (abstract, col. 2, lines 45-59; and col. 10, lines 49-61). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of

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Nakashima and Keeble because Keeble's node ranking would enhance auditing certain operational qualities of the nodes and make it simpler to identify the ones having worst operational quality and therefore in need for investigation (see, for example, Keeble, abstract)

6. As per claim 20, it is rejected for similar reasons as stated above.

7. As per claim 24, it is rejected for similar reasons as stated above.

8. As per claim 2, Nakashima teaches including advice based on said analysis in said network audit information (e.g. col. 5, lines 20-25).

9. As per claim 3, Nakashima teaches transferring said network audit information to a user (e.g. Figure 1).

10. As per claim 4, Nakashima teaches presenting said network audit information in a table selected the group consisting of: hardware summary, fault management, performance analysis, configuration management, and capacity planning (e.g. col. 6, lines 49-60).

11. As per claim 5, Nakashima teaches the method wherein said step b) comprises repeating a query to retrieve status information from a first node of a first device of said plurality of devices at a pre-determined interval (e.g. col. 1, lines 42-55).

12. As per claim 6, Nakashima teaches the method wherein: said step c) comprises determining that a condition exists at a first node of a first device of said plurality of devices that

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requires corrective action (e.g. col. 8, lines 60-67 and col. 9, lines 1-16); and reporting said condition (e.g. col. 8, lines 60-67 and col. 9, lines 1-16).

13. As per claim 7, it is rejected for similar reasons as stated above.

14. As per claim 8, Keeble discloses ranking said nodes by severity of defects (abstract, col. 2, lines 45-59; and col. 10, lines 49-61); and including said ranking in said network audit information (abstract, col. 2, lines 45-59; and col. 10, lines 49-61).

15. As per claim 9, Nakashima teaches the method further comprising the steps of: storing network audit information for a first node of a first device of said plurality of devices on a computer readable medium (e.g. col. 8, lines 29-50); and automatically accessing and transferring said network audit information for said first node in response to a request for additional information regarding said first node (e.g. col. 8, lines 29-50).

16. As per claim 10, Nakashima teaches the method further comprising the step of: determining the types of devices in said network, wherein said network comprises a plurality of types of devices (e.g. col. 1, lines 42-55).

17. As per claims 27-31, Nakashima teaches presenting said network audit information in a table selected the group consisting of: hardware summary, fault management, performance analysis, configuration management, and capacity planning (e.g. col. 6, lines 49-60). Keeble, on the other hand, discloses ranking of nodes of the plurality of devices in analyzing the responses (abstract, col. 2, lines 45-59; and col. 10, lines 49-61). ). It would have been obvious to one

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skilled in the art at the time of the invention to combine the teachings of Nakashima and Keeble and use Keeble's concept of ranking the nodes for the plurality of categories in the table in order to enhance the monitoring functionality of the system and identifying the nodes having worst operational quality in each category and therefore in need for investigation (see, for example, Keeble, abstract)

18. Claims 11, 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima in view Keeble and further in view of Topff et al. (US 6,026,500), hereinafter "Topff".

19. As per claim 11, Nakashima does not specifically teach basing a query to a device on said device type. Topff, on the other hand, teaches basing a query to a device on said device type (e.g. col. 3, lines 36-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nakashima, Keeble, and Topff. The motivation would have been to provide for managing different devices in a network.

20. As per claim 21, it is rejected for similar reasons as stated above.

21. As per claim 25, it is rejected for similar reasons as stated above.

22. Claims 12, 14, 15, 17-19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima in view of Keeble, and further in view of Bavant et al. (US 6,529,473), hereinafter "Bavant".

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23. As per claim 12, the claim is rejected for similar reasons as claim 1 above. However, Nakashima and Keeble do not specifically teach determining the nodes that each of said plurality of optical routing devices comprises and determining for each said node its type, wherein said optical routing devices are operable to provide an interface between data transferred on an optical communication link and a communication link which is not optical. Bavant, on the other hand, teaches determining the nodes that each of said plurality optical routing devices comprises and determining for each said node its type, wherein said optical routing devices are operable to provide an interface between data transferred on an optical communication link and a communication link which is not optical (e.g. col. 1, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nakashima, Keeble and Bavant. The motivation would have been to provide for monitoring of an optical node.

24. As per claim 14, Nakashima teaches including advice based on said analysis in said network audit information (e.g. col. 5, lines 20-25).

25. As per claim 26, it is rejected for similar reasons as stated above.

26. As per claim 15, Nakashima teaches repeating a query to retrieve status information from a first node of a first device of said plurality of devices at a pre-determined interval (e.g. col. 1, lines 42-55).

27. As per claim 17, it is rejected for similar reasons as stated above.

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28. As per claim 18, it is rejected for similar reasons as stated above.

29. As per claim 19, it is rejected for similar reasons as stated above.

30. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima in view of Keeble and Bavant and further in view of Topff.

31. As per claim 13, Nakashima, Keeble, and Bavant do not specifically teach determining if a critical condition exists in said network by applying pre-determined rules to said status queries, wherein said rules are based on the node type. Topff, on the other hand, teaches determining if a critical condition exists in said network by applying pre-determined rules to said status queries, wherein said rules are based on the node type (e.g. col. 2, lines 31-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nakashima, Keeble, Bavant and Topff. The motivation would have been to provide for a way to flag critical conditions in an optical network.

32. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima in view of Keeble and Bavant and further in view of Ouellet et al. (US 6,584,535), hereinafter "Ouellet".

33. As per claim 16, Nakashima in combination with Keeble, and Bavant do not specifically teach selecting node types from the group consisting of: Dynamic Packet Transport (DPT), Packet Over Synchronous (POS), and Optical Regenerators. Ouellet, on the other hand, teaches selecting node types from the group consisting of: Dynamic Packet Transport (DPT),



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Packet Over Synchronous (POS), and Optical Regenerators (e.g. col. 2, lines 12-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nakashima, Keeble, Bavant and Ouellet. The motivation would have been to provide for a packet transport system.

34. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima in view of Keeble, and further in view of Schlosser et al. (US 5,968,122), hereinafter "Schlosser".

35. As per claim 22, Nakashima and Keeble do not specifically teach reporting that a critical condition exists at a first active node, and reporting that a warning condition exists at a second active node. Schlosser, on the other hand, teaches that a critical condition exists at a first active node(e.g. col. 6, lines 58-67) ; and reporting that a warning condition exists at a second active node (e.g. col. 6, lines 58-67). It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine Nakashima, Keeble, and Schlosser. The motivation would have been to provide for an alert system.

36. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima in view of Keeble, and further in view of "Official Notice".

37. As per claim 23, Nakashima and Keeble do not specifically teach reporting a trend of network data over time." Official Notice" is taken that both the concept and the advantages of reporting network data over time is well known and expected in that art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to display the data over time. The graph would provide for an easier way of monitoring network performance.

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38. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

39. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


40. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 5, 2005

  
Nabil El-Hady, Ph.D, M.B.A.  
Primary Patent Examiner  
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